

V. Claim Amendments under 37 C.F.R. § 1.121

1. (Currently amended) A method of promoting blood coagulation in an individual having a blood coagulation defect and in need thereof, comprising administering to the individual a blood coagulation enhancing effective amount of said DNA vector encoding a human Factor VII polypeptide that can be converted to Factor VIIa when expressed in said individual, said Factor VII polypeptide comprising an enzymatic cleavage site susceptible to cleavage by furin, wherein said enzymatic cleavage site is located in the area of about amino acid 147 through about 154 of said Factor VII and wherein at least one amino acid mutations have been made in said area to create said enzymatic cleavage site, and, whereby cleavage by furin produces Factor VII heavy chain and Factor VII light chain molecules.
2. (New) A method of promoting blood coagulation in an individual having a blood coagulation defect and in need thereof, comprising administering to the individual a blood coagulation enhancing effective amount of said DNA vector encoding a human Factor VII polypeptide that can be converted to Factor VIIa when expressed in said individual, said Factor VII polypeptide comprising an enzymatic cleavage site susceptible to cleavage by SKI-1, wherein said enzymatic cleavage site is located in the area of about amino acid 147 through about 154 of said Factor VII and wherein at least one amino acid mutations have been made in said area to create said enzymatic cleavage site, and, whereby cleavage by SKI-1 produces Factor VII heavy chain and Factor VII light chain molecules.
3. (New) A method according to claim 1, wherein said DNA vector further comprises a liver-specific promoter.
4. (New) A method according to claim 2, wherein said DNA vector further comprises a liver-specific promoter.
5. (New) A method according to claim 1, wherein amino acid 149 is changed from proline to arginine and amino acid 151 is changed from glycine to lysine.
6. (New) A method according to claim 1, wherein amino acids 147 through 150 have been replaced by the amino acid sequence of SEQ ID NO. 17.
7. (New) A method according to claim 5, wherein amino acids 147 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 2.
8. (New) A method according to claim 5, wherein amino acids 147 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 5.

9. (New) A method according to claim 5, wherein amino acids 147 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 7.
10. (New) A method according to claim 1, wherein amino acids 147 through 150 have been replaced by the amino acid sequence of SEQ ID NO. 18.
11. (New) A method according to claim 1, wherein amino acids 148 through 151 have been replaced by the amino acid sequence of SEQ ID NO. 17.
12. (New) A method according to claim 1, wherein amino acids 148 through 151 have been replaced by the amino acid sequence of SEQ ID NO. 18.
13. (New) A method according to claim 1, wherein amino acids 150 through 153 have been replaced by the amino acid sequence of SEQ ID NO. 17.
14. (New) A method according to claim 1, wherein amino acids 150 through 153 have been replaced by the amino acid sequence of SEQ ID NO. 18.
15. (New) A method according to claim 1, wherein amino acids 151 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 17.
16. (New) A method according to claim 1, wherein amino acids 151 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 18.
17. (New) A method according to claim 12, wherein amino acids 151 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 9.
18. (New) A method according to claims 1 or 2, wherein enhanced blood clotting results in the individual relative to blood clotting when an effective amount of the DNA vector is not administered.
19. (New) A composition comprising a DNA vector encoding a human Factor VII polypeptide that can be converted to Factor VIIa when expressed in said individual, said Factor VII polypeptide comprising an enzymatic cleavage site susceptible to cleavage by furin, wherein said enzymatic cleavage site is located in the area of about amino acid 147 through about 154 of said Factor VII and wherein at least one amino acid mutations have been made in said area to create said enzymatic cleavage site.

20. (New) A composition comprising a DNA vector encoding a human Factor VII polypeptide that can be converted to Factor VIIa when expressed in said individual, said Factor VII polypeptide comprising an enzymatic cleavage site susceptible to cleavage by SKI-1, wherein said enzymatic cleavage site is located in the area of about amino acid 147 through about 154 of said Factor VII and wherein at least one amino acid mutations have been made in said area to create said enzymatic cleavage site.
21. (New) A composition according to claim 19, wherein said DNA vector further comprises a liver-specific promoter.
22. (New) A composition according to claim 20, wherein said DNA vector further comprises a liver-specific promoter.
23. (New) A composition according to claim 19, wherein amino acid 149 is changed from proline to arginine and amino acid 151 is changed from glycine to lysine.
24. (New) A composition according to claim 19, wherein amino acids 147 through 150 have been replaced by the amino acid sequence of SEQ ID NO. 17.
25. (New) A composition according to claim 23, wherein amino acids 147 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 2.
26. (New) A composition according to claim 23, wherein amino acids 147 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 5.
27. (New) A composition according to claim 23, wherein amino acids 147 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 7.
28. (New) A composition according to claim 19, wherein amino acids 147 through 150 have been replaced by the amino acid sequence of SEQ ID NO. 18.
29. (New) A composition according to claim 19, wherein amino acids 148 through 151 have been replaced by the amino acid sequence of SEQ ID NO. 17.
30. (New) A composition according to claim 19, wherein amino acids 148 through 151 have been replaced by the amino acid sequence of SEQ ID NO. 18.

31. (New) A composition according to claim 19, wherein amino acids 150 through 153 have been replaced by the amino acid sequence of SEQ ID NO. 17.

32. (New) A composition according to claim 19, wherein amino acids 150 through 153 have been replaced by the amino acid sequence of SEQ ID NO. 18.

33. (New) A composition according to claim 19, wherein amino acids 151 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 17.

34. (New) A composition according to claim 19, wherein amino acids 151 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 18.

35. (New) A composition according to claim 20, wherein amino acids 151 through 154 have been replaced by the amino acid sequence of SEQ ID NO. 9.